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BE IT KNOWN THAT I, CLAUS-CHR. ECKHARDT, a citizen of
Germany, whose post office address is, respectfully, Sallstr. 41, 30171 Hannover,
Germany, have invented certain new and useful improvements in:

APPLIANCE WITH INDICATING DEVICE

of which the following is a complete specification:

BACKGROUND OF THE INVENTION

The present invention generally relates to an appliance with an indicating device.

Appliances of the above mentioned general type are known in the art. In particular, an appliance is known which is formed as a cordless telephone with an outer surface provided with a throughgoing passage for receiving an indicating device. An edge region which surrounds the throughgoing opening of the appliance is depressed relative to the outer surface of the appliance. The edge region operates as a supporting surface for a transparent disk for covering an indicating device which is formed for example as a display.

Moreover, it is known to decorate the edge region, for example by applying a granulate or a lacquer.

SUMMARY OF THE INVENTION

Accordingly, it is an object of the present invention to provide an appliance with an indicating device which is further improvement of the existing appliances.

In keeping with these objects and with others which will become apparent hereinafter, one feature of the present invention resides in an appliance, in which on the edge region, a decorative part is insertable, and is mountable on the edge region by a releasable connection.

When the appliance is designed in accordance with the present invention, the decorative part is provided which in a simple manner without damaging the appliance housing is mounted on the edge region or can be premounted on it. In this way the consumer must not look for an experienced person and without losing a guarantee can exchange the decorative part in accordance with its taste and replace with another decorative part, so that the outer surface of the housing can be designed individually. For example, the consumer can use a different decorative part which are sold by the manufacturer.

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In accordance with another feature of the present invention, the releasable connection can be formed as an adhesive connection. Such a connection is especially stable.

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In accordance with still a further feature of the present invention, the releasable connection can be formed as an arresting connection. In this way the decorative part can be stably connected with the edge region, and also a simple and accurately defined mounting or dismounting can be performed by means of the available arresting elements.

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In accordance with still a further feature of the present invention, a gap is provided between the decorative part and the edge region for receiving for example a turning tool for releasing the connection. In this manner, the dismounting can be performed simply and does not need special finger strength.

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In accordance with still a further feature of the present invention, the edge region can be depressed by two steps relative to the outer surface of the appliance, so as to include a deeper step for limiting the throughgoing passage in which a transparent disk covering the indicating device is placed, and a higher step on which the decorative part is placed. In this way, the covering of the indicating device and the decoration can be

0 applied independently from one another on the housing or removed from the housing.

5 The novel features which are considered as characteristic for the present invention are set forth in particular in the appended claims. The invention itself, however, both as to its construction and its method of operation, together with additional objects and advantages thereof, will be best understood from the following description of specific embodiments when read in connection with the accompanying drawings.

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Figure 1 is a view of an operating surface of a cordless telephone in accordance with the present invention;

Figure 2 is a spacial view of a display-end decorating region of the cordless telephone;

Figure 3 is a view showing a section through an edge region with a glued decorative part;

Figure 4 is a view showing a section of the edge region with an arresting projection and an arresting opening;

Figure 5 is a view showing a section through the edge region with an arresting projection of the decorative part engaging in the edge region; and

Figure 6 is a view showing a section through the edge region with the arresting projection of the edge region engaging in the decorative part.

DESCRIPTION OF PREFERRED EMBODIMENTS

Figure 1 shows an appliance in accordance with the present invention which is formed as a cordless telephone 1. Its operating surface shown in Figure 1 is identified with reference numeral 90. An indicating device 5 is inserted in the operating surface 9 and covered by a transparent disk 75. The indicating device 5 and the transparent disk 75 are surrounded by a decorative part 25. The decorative part 25 also surrounds five keys 85 of the key field on the operating surface 90. For this purpose the decorative part 25 is provided with throughgoing openings for receiving the indicating device 5 and for receiving the keys 85. The operating surface 90 of the cordless telephone 1 also has twelve keys 80 located outside of the decorative part 25.

Figure 2 shows the outer surface 10 of the cordless telephone 1 from the side of the operating surface 90. The outer surface 10 of the appliance has a throughgoing opening 15 for receiving the indicating device 5, as well as an edge region 20 which surrounds the throughgoing opening 15 and is depressed with two stages relative to the outer surface 10 of the appliance. A deeper stage 65 of the two-stage edge region 20 which limits the throughgoing opening 15 serves for supporting a transparent disk 75 which covers the indicating device 5. A higher step 70 of the two-step edge

0 region 20 serves for supporting the decorative part 25. The higher stage 70 of the two-edge region has also five throughgoing openings 86 for receiving the keys 85 located inside the decorative part 25. For the keys 80 located outside of the decorative part 25, throughgoing openings 81 are provided correspondingly in the outer surface 10 of the appliance.

5 The decorative part 25 is inserted on the edge region 20 and mounted on the edge region 20 by a releasable connection. The releasable connection can be formed for example as an adhesive connection. As can be seen in a vertical cross-section A-A in the edge region 20 of the cordless telephone 1, in Figure 3 the mounting of the decorative part 25 on the edge region 20 is shown. The decorative part 25 is connected by a double-side adhesive band 30 with the higher stage 70 of the two-stage edge region 20. A gap 35 is formed between the decorative part 25 and the higher stage 70, toward the deeper stage 65 of the two-stage edge region 20 through the double-sided adhesive band 30.

15 The transparent disk 75 is located on the deeper stage 65. The connection between the transparent disk 75 and the deeper stage 65 is not shown, however it also can be performed by adhesive. A second gap 95 is formed between the transparent disk 75 on the one hand and the decorative part 25 and the higher stage 70 on the other hand. Together with

0 the first gap 35, the second gap 95 allows outer access for releasing of the
connection. The releasing of the adhesive connection can be performed for
example manually. The first gap 35 can also serve for receiving a turning
tool, so that when the turning tool is placed on the edge of the transparent
disk 75 a lever action can be applied to the adhesive connection without
5 high efforts and without damaging the edge region 20 so that the transparent
disk 75 can be released. Figure 3 shows the outer surfaces of the
decorative part 25 and the transparent disk 75, as well as the outer surface
10 of the appliance which are arranged in one plane. The decorative part
25 has the same width as the higher step 70. From the design reasons,
however other dimensions are recommended as well.

In Figure 3 an adhesive surface is identified with a reference
numeral 30. The decorative part 25 is provided with this adhesive surface
at its side which faces the edge region 20 and is connected with the edge
region 20 in a self-adhesive manner by this surface.

15 An arresting connection can be also used as a releasable
connection between the decorative part 25 and the edge region 20. Such
a connection is shown in Figures 4, 5 and 6. Figure 4 shows the outer
surface 10 of the appliance on a corner of the two-stage edge region 20.
The higher stage 70 has an arresting projection 50 and an arresting opening

0 55. Further arresting projections and arresting openings can be provided in
the part of the edge region 20 which is not shown in Figure 4. For illustration
of the arresting connection, Figure 5 shows a vertical cross-section B-B
through the edge region 20 at the location of the arresting opening 55, and
Figure 6 shows a vertical section C-C through the edge region 20 at the
5 location of the arresting projection 50.

In contrast to Figure 3, the decorative part 25 in Figure 5 is
connected with the higher step 70 of the two-step edge region not by an
adhesive layer. Moreover, the decorative part 25 at its side facing the edge
region 20 has an arresting projection 40 which engages in the arresting
opening 55 of the higher step 70 of the edge region 20, which faces the
decorative part 25. The arresting opening 55 opens between the higher step
70 and the deeper step 65 in direction toward the transparent disk 70. The
transparent disk 70 is placed on the deeper step 65 and separated from the
higher step 70 by a second gap 95. In particular, the arresting opening 55
opens into a first gap 35 for receiving the arresting projection of the
decorative part 25. The arresting projection 40 can be simply pressed back
through the first and second gaps 35, 95 by hand or in a simple manner by
a turning tool, so that the decorative part 25 is removable.

0 In Figure 6 the arresting projection 50 of the higher step 70 of
the two-step edge region 20, which faces the decorative part 25, engages
an arresting opening 45 of the decorative part 25 which faces the higher step
70. In contrast to Figure 3, no adhesive layer is provided between the
decorative part 25 and the higher step 70. The arresting opening 45 of the
5 decorative part 25 which faces the higher step 70 opens into the first gap 35
for receiving the arresting projection 50 of the higher step 70. The first gap
35 is oriented toward the transparent disk 75 which is placed on the deeper
stage 65 and is separated by a first gap 95 from the higher step 70. The
arresting projection 50 of the higher step 70 of the edge region 20 is pressed
back by hand or simply by a turning tool through the first and the second
gaps 35, 95, so that the decorative part 25 can be removed in a simple
manner.

The decorative part 25 can be formed as a synthetic plastic
part, as a wood part, or as a metal part, formed for example as a foil or as a
15 rigid part. The application of this invention is not only a cordless telephone,
but also any appliance in which an indicating device is surrounded by a
decorative part. It can be also a radio device which an image screen on the
outer surface of the appliance is surrounded by a decorative part, etc.

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It will be understood that each of the elements described above, or two or more together, may also find a useful application in other types of constructions differing from the types described above.

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While the invention has been illustrated and described as embodied in appliance with decorative device, it is not intended to be limited to the details shown, since various modifications and structural changes may be made without departing in any way from the spirit of the present invention.

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Without further analysis, the foregoing will so fully reveal the gist of the present invention that others can, by applying current knowledge, readily adapt it for various applications without omitting features that, from the standpoint of prior art, fairly constitute essential characteristics of the generic or specific aspects of this invention.

What is claimed as new and desired to be protected by Letters Patent is set forth in the appended claims.